Application No. 10/604,570

In the Claims:

1. (Currently amended) A door security apparatus, comprising:

(a) a channeled extension beam having a longitudinal axis, said beam is adapted to fit over and removably engage a pair of adjacent door edges of a pair of

adjacent doors that are in a closed state, wherein said beam is operational to

substantially secure the pair of adjacent doors in the closed state; and

(b) a ratchet cap assembly having a threadable engagement with a beam

externally threaded element adjacent to said beam with an aperture

therethrough, said beam externally threaded element being substantially

symmetric to the means a rotational axis that is substantially perpendicular to the

beam longitudinal axis, said ratchet cap assembly only having rotational axial

movement along said threadable engagement with the application of a manual

external force approximately parallel to the rotational axis toward said beam, an

extension member and a clamping member are both in slidable axial contact with

said ratchet cap being disposed through said aperture therethrough and are

operational to clamp and unclamp said beam to at least one door edge.

a means for manually selectively rotatably clamping or unclamping said beam to

at least one door edge, said means only manually selectively clamping or

unclamping said beam from the door edge by applying an external manual force

in conjunction with a manual forward or a manual reverse rotation respectively,

wherein said means for manually selectively rotatably clamping or unclamping

when in a clamped state freewheels rotationally about a means rotational axis precluding manually selectively unclamping said beam from the door edge and wherein said means for manually selectively rotatably clamping or unclamping moves from said clamped state to an unclamped state when the external manual force is applied in conjunction with the manual reverse rotation, thus allowing unclamping of said beam from the door edge, thus said means for manually selectively rotatably clamping or unclamping is adapted to further substantially secure the pair of adjacent doors in the closed state, thereby to help protect against unauthorized opening of the pair of adjacent doors by placing the pair of adjacent doors into an open state.

- 2. (Original) A door security apparatus according to claim 1 wherein said beam is constructed of materials selected from the group consisting essentially of polyethylene, polypropylene, and polyurethane materials.
- 3. (Currently amended) A door security apparatus according to claim 1 wherein said <u>ratchet cap assembly</u> means for manually selectively rotatably clamping or unclamping said beam to at least one door edge is constructed of materials selected from the group consisting essentially of polyethylene, polypropylene, and polyurethane materials.
- 4. (Currently amended) A door security apparatus according to claim 1 further comprising a <u>plurality of said ratchet</u> cap assemblies. means for manually

selectively rotatably clamping or unclamping said beam to at least one door edge.

5. (Cancelled)

- 6. (Currently amended) A door security apparatus according to claim 1 5 wherein said ratchet cap assembly is constructed of a ratchet cap outer shell that has a rotationally releasably engagable interface with a ratchet cap insert, wherein said ratchet cap outer shell operationally accepts the manual external force and a manual forward or a manual reverse rotation and said ratchet cap insert having a threadable engagement with said beam externally threaded element with said ratchet cap insert being in slidable axial contact with said extension member and said clamping member.
- 7. (Original) A door security apparatus according to claim 6 wherein said ratchet cap assembly rotationally releasably engagable interface between said ratchet cap outer shell and said ratchet cap insert is constructed of a plurality of radially positioned axial protrusions disposed within said ratchet cap outer shell, each said protrusion including substantially parallel sides with one side for tightening and one side for loosening, said ratchet cap insert also includes a plurality of radially positioned axial nodes that are adjacent to said protrusions, each said node includes non parallel faces with a tightening face that is substantially parallel to said tightening side and a loosening face that forms an acute angle

with said loosening side, said protrusions and nodes are operational to allow free rotational movement between said shell and insert without the application of the external manual force, also to allow forward tightening manual rotation resulting in rotational engagement between said shell and insert upon the manual application of a lower external force and to allow reverse loosening manual rotation resulting in rotational engagement between said shell and insert upon the manual application of a higher external force.

- 8. (Currently amended) A door security apparatus according to claim 1 wherein said ratchet cap assembly means for manually selectively rotatably clamping or unclamping said beam to at least one door edge has indicia visibly disposed on said ratchet cap assembly means that is operational to give instructions to a user for manually selectively rotatably clamping or unclamping said beam to at least one door edge.
- 9. (Currently amended) A door security apparatus, wherein a door is hinged to a door frame on one side approximately perpendicular to a door edge, comprising:
- (a) a channeled extension beam having a longitudinal axis, a portion of said beam is adapted to fit over and removably engage the door edge of the door and a remainder of said beam is adjacent to the frame, wherein the door is in a closed state, wherein said beam is operational to substantially secure the door in the closed state; and

(b) a ratchet cap assembly having a threadable engagement with a beam externally threaded element adjacent to said beam with an aperture therethrough, said beam externally threaded element being substantially symmetric to the means a rotational axis that is substantially perpendicular to the beam longitudinal axis, said ratchet cap assembly only having rotational axial movement along said threadable engagement with the application of a manual external force approximately parallel to the rotational axis toward said beam, an extension member and a clamping member are both in slidable axial contact with said ratchet cap being disposed through said aperture therethrough and are operational to clamp and unclamp said beam to the door edge. a means for manually selectively rotatably clamping or unclamping said beam to the door edge, said means only manually selectively clamping or unclamping said beam from the door edge by applying an external manual force in conjunction with a manual forward or a manual reverse rotation respectively, wherein said means for manually selectively rotatably clamping or unclamping when in a clamped state freewheels rotationally about a means rotational axis precluding manually selectively unclamping said beam from the door edge and wherein said means for manually selectively rotatably clamping or unclamping moves from said clamped state to an unclamped state when the external manual force is applied in conjunction with the manual reverse rotation, thus allowing unclamping of said beam from the door edge, thus said means for manually selectively rotatably clamping or unclamping is adapted to further substantially secure the door in the closed state, thereby to help protect against unauthorized opening of the door by placing the door into an open state.

- 10. (Original) A door security apparatus according to claim 9 wherein said beam is constructed of materials selected from the group consisting essentially of polyethylene, polypropylene, and polyurethane materials.
- 11. (Currently amended) A door security apparatus according to claim 9 wherein said <u>ratchet cap assembly</u> means for manually selectively rotatably clamping or <u>unclamping said beam to at least one door edge</u> is constructed of materials selected from the group consisting essentially of polyethylene, polypropylene, and polyurethane materials.
- 12. (Currently amended) A door security apparatus according to claim 9 further comprising a plurality of said <u>ratchet cap assemblies</u>. means for manually selectively rotatably clamping or unclamping said beam to the door edge.

13. (Cancelled)

14. (Currently amended) A door security apparatus according to claim 9 13 wherein said ratchet cap assembly is constructed of a ratchet cap outer shell that has a rotationally releasably engagable interface with a ratchet cap insert, wherein said ratchet cap outer shell operationally accepts the manual external

force and <u>a</u> manual forward or <u>a</u> manual reverse rotation and said ratchet cap insert having a threadable engagement with said beam externally threaded element with said ratchet cap insert being in slidable axial contact with said extension member and said clamping member.

15 (Original) A door security apparatus according to claim 14 wherein said ratchet cap assembly rotationally releasably engagable interface between said ratchet cap outer shell and said ratchet cap insert is constructed of a plurality of radially positioned axial protrusions disposed within said ratchet cap outer shell, each said protrusion includes substantially parallel sides with one side for tightening and one side for loosening, said ratchet cap insert also includes a plurality of radially positioned axial nodes that are adjacent to said protrusions, each said node includes non parallel faces with a tightening face that is substantially parallel to said tightening side and a loosening face that forms an acute angle with said loosening side, said protrusions and nodes are operational to allow free rotational movement between said shell and insert without the application of the external manual force, also to allow forward tightening manual rotation resulting in rotational engagement between said shell and insert upon the manual application of a lower external manual force and to allow reverse loosening manual rotation resulting in rotational engagement between said shell and insert upon the manual application of a higher manual external force.

- 16. (Currently amended) A door security apparatus according to claim 9 wherein said <u>ratchet cap assembly</u> means for manually selectively rotatably clamping or <u>unclamping said beam to the door edge</u> has indicia visibly disposed on said <u>ratchet cap assembly</u> means that is operational to give instructions to a user for manually selectively rotatably clamping or unclamping said beam to at least one door edge.
- 17. (Currently amended) A method of using a door security apparatus that is adapted to assist in retaining a pair of adjacent opposing doors having edges in a closed state, thereby to help protect against unauthorized opening of the doors by placing the doors into an open state, wherein the doors are hinged each on opposing door sides, with the door sides approximately perpendicular to the door edges, comprising the steps of:
- (a) providing a door security apparatus that includes a channeled extension beam having a longitudinal axis, said beam is adapted to fit over and removably engage the pair of adjacent door edges that are in the closed state and a means for manually selectively rotatably clamping or unclamping said beam to at least one door edge, wherein the doors have increased protection against unauthorized opening, thus placing the doors into a more secured closed state, said means only manually selectively clamping or unclamping said beam from the door edge by applying a manual external force in conjunction with a manual forward or a manual reverse rotation respectively;

- (b) placing said beam to engage the door edges to substantially secure the pair of adjacent door edges in the closed state;
- (c) positioning said beam by moving said beam substantially parallel to the longitudinal axis such that said means for manually selectively rotatably clamping said beam to the door edge in is positioned adjacent to at least one door edge and a portion of said beam is engaged to the adjacent opposing door edge; and
- (d) rotating said means for manually selectively rotatably clamping or unclamping said beam to the door edge in forward manual rotation and applying a lower manual external force in conjunction with the forward manual rotation to manually selectively rotatably clamp said beam to the door edge, wherein the adjacent opposing doors are further substantially secured in the closed state to help protect against unauthorized opening of the doors by placing the doors into the open state[[.]] : and
- (e) rotating said means for manually selectively rotatably clamping or unclamping said beam to the door edge in reverse manual rotation and applying a higher manual external force to said means in conjunction with the reverse manual rotation to release the door edge clamp of said beam to remove said door security apparatus from the doors, wherein the doors can be manually placed into the open state.

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18. (Cancelled)

19. (Currently amended) A method of using a door security apparatus that is

adapted to assist in retaining a door in a closed state, thereby to help protect

against unauthorized opening of the door by placing the door into an open state,

wherein the door is hinged to a door frame on one side approximately

perpendicular to a door edge, comprising the steps of:

(a) providing a door security apparatus that includes a channeled extension

beam having a longitudinal axis, a portion of said beam is adapted to fit over and

removably engage the door edge, and a remainder of said beam is adjacent to

the frame, wherein the door is in the closed state and a means for manually

selectively rotatably clamping or unclamping said beam to the door edge,

wherein the door has increased protection against unauthorized opening, thus

placing the door into a more secured closed state, said means only manually

selectively clamping or unclamping said beam from the door edge by applying a

manual external force in conjunction with a manual forward or a manual reverse

rotation respectively;

(b) placing said beam portion to engage the door edge and said beam remainder

to be adjacent to the frame to substantially secure the door in the closed state:

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(c) positioning said beam by moving said beam substantially parallel to the

longitudinal axis such that said means for manually selectively rotatably clamping

said beam to the door edge is positioned adjacent to the door edge and said

remainder of said beam is adjacent to the frame; and

(d) rotating said means for manually selectively rotatably clamping or unclamping

said beam to the door edge in manual forward rotation and applying a lower

manual external force in conjunction with the forward manual rotation to manually

selectively rotatably clamp said beam to the door edge, wherein the door is

further substantially secured in the closed state to help protect against

unauthorized opening of the door by placing the door into the open state[[.]] and:

(e) rotating said means for manually selectively rotatably clamping or unclamping

said beam to the door edge in reverse manual rotation and applying a higher

manual external force to said means in conjunction with the reverse manual

rotation to release the door edge clamp of said beam to remove said door

security apparatus from the door, wherein the door can be manually placed into

the open state.

20. (Cancelled)